

## LOBSTER AND CRAB POT FISHERY SAMPLING PRIORITIES

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- **Every haul** should be **both** observed, *i.e.* complete catch information for both kept and discarded species is recorded, and biologically sampled.
- Conduct sampling for **each pot**, when possible.
- Lobster pot fishery: **every individual lobster** caught should be biologically sampled when possible.

If it is not possible to biologically sample a particular haul according to protocol, the reason(s) should be noted in the comments section of the corresponding [Haul Log](#).

### CRAB CATCH ESTIMATION AND SUB-SAMPLING

Following are some suggested methods to collect **crab counts and weights** in the lobster, crab and fish pot fishery. These suggested methods are listed in order of preference. While the observer may choose to use a method other than those listed below, or make another judgement on what to sample due to time or other constraints, any sub-sampling or catch estimation method used must be recorded in the comments section of the corresponding [Haul Log](#) or [Crustacean Sample Log](#). These methods may be applied to both the kept and discarded catch.

Crab sampling of the species listed in [Table 1e](#) should occur **following lobster sampling**, as time/conditions permit. However, when the captain targets crabs with (a) particular trawl(s), crab sampling becomes equal in priority to lobster sampling.

#### Per Trawl Methods

- 1 The crew sorts all crabs to be kept into totes to be weighed (total kept weight) by the observer. The crew sorts crabs to be discarded into totes to be weighed (total discard weight) by the observer. The observer randomly fills a tote, each, from both the kept and discarded catch to be sampled.
- 2 The crew places crabs into the hold while randomly selecting some to fill a tote for the observer to weigh and sample.

The observer, using a clicker, counts the number of crabs placed in the hold. The total number of crabs caught (which includes those in the subsample tote) are divided by the number of crabs in the subsample tote. The quotient is multiplied by the weight of the tote to yield an estimated total kept weight. The observer also samples the crabs in the tote. Follow these procedures for weight determination and length frequency sampling of discards.

Example: 300 crabs are placed in the hold, and 50 crabs are counted in the tote. The actual sample weight of the tote is 100 lbs:  
 $[(300 + 50) \div 50] * 100 = 700$  lbs total kept catch

- 3 The crew places crabs into the hold while randomly selecting some to fill a tote for the observer to sample. The observer estimates the pounds of crabs placed in the hold. This estimated weight is added to the actual tote weight (sample weight) to yield an estimated total kept weight. The observer also samples the crabs in the tote. Follow these procedures for weight estimation and length frequency sampling of discards.

#### Per Day Methods

- 1 Following one haul selected randomly each day (this haul should not routinely be the last haul of the day),

the crew places all of the kept crabs into totes to be weighed and sampled by the observer. Follow these procedures for weight determination and biological sampling of discards. For the remaining hauls of each day, the observer estimates the kept and discarded crab catch weights, but does not conduct any sampling.

- 2 Follow the methods of number 2 or 3, above, for one haul per day.

**Table 1e.** Length frequency and age structure sampling priorities in the lobster, crab and fish pot fishery.

Species	Length Frequencies		Age Structures	
	Kept	Discard	Kept	Discard
<b>Gulf of Maine (Statistical area 515)</b>				
Crab, Jonah	2	2	-	-
Crab, Red	2	2	-	-
Crab, Rock	2	2	-	-
Lobster, American	1	1	-	-
Wolffish	3	3	-	-
NOTE: When crabs are the target of (a) particular trawl(s), the crab priority will be the same as lobster.				

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